VOLVO CAR CORPORATION

EXECUTIVE ORDER A-018-0149

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	TEST GROUP	VEHICLE TYPE	EXHAUST EMISSION STANDARD CATEGORY	STANDARD CATEGORY (miles)				FUEL TYPE		
2008	8VVXV02.4S2N	Passenger Car	"LEV II" Super Ultra Low Emission Vehicle (LEV II	EXH / ORVR	EVAP	EXH	EVAP	Gasoline		
Z	•		SULEV)	150K 150K		*	*	Gasoline		
No.	ECS & S	PECIAL FEATURES	lichter .	EVAPORATIVE FAMILY (EVAF) DISPLACEMEN						
1	TWC, 2HO2	S, HAFS, SFI, OBD(P)	8VVXR0	8VVXR0124ZER						
*		*	*							
*		*	Ţ,		٠,,		2.4			
*		*	•							

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

BE IT FURTHER RESOLVED:

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

BE IT FURTHER RESOLVED:

That the listed vehicle models are granted a partial zero-emission-vehicle (PZEV) allowance of 0.2 pursuant to 13 CCR Section 1962 (c)(2).

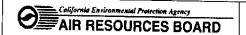
Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this 22 day of June 2007.

Annette Hebert, Chief

Mobile Source Operations Division



New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

NMOG FLEET NMOG AVERAGE [g/mi] CH4 F		@ RAF=* !AF = *		CH4=metha HCHO=form	ene; NMOG= naldehyde; P	non-CH4 o	rganic gas; Nr ale matter: RA	MHC=non-Cl	H4 hydrocarbo adjustment fac	n; CO=carbo	n monoxide; I	VOx=oxides o	f nitrogen;	
CERT	STD	NMOG CERT	NMHC CERT	NMHC STD	hot-soak; R mi=mile; K	L (g/mi)≂run: =1000 miles:	ning loss; C F≃degrees	ORVR [g/gailor Fahrenheit: S	dispensed]:	adjustment fac =on-board refu emental federa	eling vapor r	resij=2/3 day ecovery; gi≃gi	olumai+ 'am; mg=milliq	yram.
0.034	0.024 0.046		[g/mi] [g/mi]		COlgimi		NOx [g/mi]		HCHO [mg/mi]		PM [g/mi]		Hwy NOx [g/mi]	
		<u> </u>		<u> </u>	CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
1.0	@ 50K			*	· •	*	•	•	•		*		- OLKI	310
	@ UL	0.007	*	0.010	0.2	1.0	0.01	0.02	 , 	+		0.01	0.04	
.	50°F & 4K	*	•	•	*							0.01	0.01	0.03
CO [g	/mil		Carata - 7- 105.	NMHC+NO		CO [g/		NMHC+N		CO [g/mi]	NMI	IC+NOx	co [a/mil
@ 20°F 8				(comp	osite)	(compo	site)	[g/mi] [US	06]	[US06]		[SC03]	įsc	

CERT		P@ 4000 miles SFTP @ * miles	ERT	STD	CERT	STD	0.02	STD 0.14	CERT 0.7	STD 8.0	0.01	STD 0.20	CERT 0.1	STD 2.7
	10.0 陰	FIF (g) Innes					*	*	*		*	*	*	*
Eva	porative Family	3-Days Diuri (grams/i	nal + Hot So lest) @ UL	oak 2-l	Days Diu (grams	rnal + Ho /test) @	ot Soak UL		unning Le		Rec	n-Board F	Refueling V ams/gallon	apor
ļ		CERT	STD		CERT		STD	CER	T	STD		CERT		STD

Evaporative Family		al + Hot Soak est) @ UL		ai+ Hot Soak est) @ UL		ng Loss nile) @ UL	On-Board Ref	
] 	CERT	STD	CERT	STD	CERT	STD	CERT	STD
8VVXR0124ZER	0.26	0.35	0.30	0.35	0.01	0.05	0.01	
•	*	•	*	•	*	•	*	0.20
*	*	+	*	*	*		 	
<u> </u>	*	*	*	*	+		 	
* = not applicable: 11 =useful life:	DC							

*= not applicable; UL=useful life; PC=passenger car; LDT=light-duty truck; MDV=medium-duty vehicle; ECS= Emission Control System; STD= Standard; CERT= Certification; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; TLEV=transitional LEV; ULEV=ultra LEV; SULEV=super ULEV; TWC=3-way catalyst; ADSTWC=adsorbing TWC; WU=warm-up catalyst; OC=oxidizing catalyst; O2S=oxygen sensor; HO2S=heated O2S; AFS/HAFS=air- fuel ratio sensor / heated AFS; EGR=exhaust CAC=charge air cooler; OBD (F)/(P)=full/partial on-board diagnostic; DOR=direct ozone reducing; prefix 2=parallel; (2) suffix=series; CNG/LNG= compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85="85%" Ethanol Fuel

2008 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	EVAPORATIVE FAMILY	ECS NO.	ENGINE SIZE (L)	IN- COMP ("=N/A or A/E=ex	MEDIATE -USE PLIANCE r full in-use; (h. / evap. liate in-use)	PHASE-IN STD.	OBD II
	 		<u> </u>		EXH	EVAP]	
VOLVO	S40 2.4i	8VVXR0124ZER	1	2.4	*		SFTP	Partial
VOLVO	V50 2.4i	8VVXR0124ZER	1	2,4	*	*	SFTP	Partial